

AWARD/CONTRACT		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350) ▶		RATING DO-C9		PAGE OF PAGE(S) 1 68	
2. CONTRACT NO. (Proc. Inst. Ident.) NO. NAS1-98110		3. EFFECTIVE DATE 5/1/98		4. REQUISITION/PURCHASE REQUEST/PROJECT NO. GJE.8762			
5. ISSUED BY: National Aeronautics and Space Administration Langley Research Center Hampton, VA 23681-2199		CODE		6. ADMINISTERED BY (If other than Item 5) Delegation being made Via NF 1430 Critically Designator C		CODE	
7. NAME AND ADDRESS OF CONTRACTOR (No., street, city, county, State and ZIP code) Raytheon Support Services Company 5740 E. Bayside Road Virginia Beach, VA 23455				8. DELIVERY <input type="checkbox"/> FOB ORIGIN <input checked="" type="checkbox"/> OTHER (See below)			
				9. DISCOUNT FOR PROMPT PAYMENT NONE			
				10. SUBMIT INVOICES (4 copies unless other-wise specified) TO THE ADDRESS SHOWN IN: ▶ ITEM G.3			
CODE		FACILITY CODE		11. SHIP TO/MARK FOR See F.2 and F.3.			
CODE		CODE		12. PAYMENT WILL BE MADE BY: Financial Management Division, M/S 175 NASA, Langley Research Center Hampton, VA 23681-2199			
13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION <input type="checkbox"/> 10 U.S.C. 2304(c) () <input type="checkbox"/> 41 U.S.C. 253(c) ()				14. ACCOUNTING AND APPROPRIATION DATA GGI.2090; C200202; \$10,850; Complete GJE.8762; M2079; \$200,000; Partial			
15A. ITEM NO.	15B. SUPPLIES/SERVICES		15C. QTY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT	
	Electronics Fabrication and Electronic Equipment Support Services		Base Option 1 Option 2 Option 3 Option 4 Total	Cost	Fee		
15G. TOTAL AMOUNT OF CONTRACT ▶						\$	

16. TABLE OF CONTENTS							
(✓)	SEC.	DESCRIPTION	PAGE(S)	(✓)	SEC.	DESCRIPTION	PAGE(S)
PART I – THE SCHEDULE				PART II – CONTRACT CLAUSES			
X	A	SOLICITATION/CONTRACT FORM	1	X	I	CONTRACT CLAUSES	15
X	B	SUPPLIES OR SERVICES AND PRICES/COSTS	2	PART III – LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS			
X	C	DESCRIPTIONS/SPECS./WORK STATEMENTS	3	X	J	LIST OF ATTACHMENTS	22
	D	PACKAGING AND MARKING		PART IV – REPRESENTATIONS AND INSTRUCTIONS			
X	E	INSPECTION AND ACCEPTANCE	6		K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	
X	F	DELIVERIES OR PERFORMANCE	6		L	INSTRS., CONDS., AND NOTICES TO OFFERORS	
X	G	CONTRACT ADMINISTRATION DATA	7		M	EVALUATION FACTORS FOR AWARD	
X	H	SPECIAL CONTRACT REQUIREMENTS	11				

CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17. <input checked="" type="checkbox"/> CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return <u>3</u> copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents (s) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)		18. <input type="checkbox"/> AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number _____, including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.	
19A. NAME AND TITLE OF SIGNER (Type or print)		20A. NAME OF CONTRACTING OFFICER ROSEMARY C. FROELICH	
19B. NAME OF CONTRACTOR BY _____ (Signature of person authorized to sign)	19C. DATE SIGNED	20B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)	20C. DATE SIGNED

PART I - THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 SUPPLIES AND/OR SERVICES TO BE FURNISHED (LaRC 52.211-90) (AUG 1997)

A. The Contractor shall provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary to furnish the Description/Specifications/Work Statement in Section C. The Statement of Work covers the general requirements for Contract Line Item 1 (CLIN 1), Electronics Fabrication and CLIN 2, Electronic Equipment Support.

B. The requirement identified in CLIN 1 (Tasks 1.1-4) will be ordered through the issuance of individually priced Government authorized Work Requests. The following are the applicable labor categories and associated fully burdened fixed hourly rates (exclusive of fee and material costs) for regular time and overtime to be used in issuing Work Requests. These labor categories and rates will be utilized by the Government to establish cost standards for comparison purposes in calculating the Incentive Fee.

	<u>Fully Burdened Rate Per Hour</u>	<u>Fully Burdened Overtime Rate Per Labor Hour</u>
Engineering Technician II (CLIN 1)		
Engineering Technician I (CLIN 1)		

C. The requirement identified in CLIN 2 will be ongoing and shall begin on the effective date of the contract and continue without interruption through the period of performance of the contract. The CLIN 2 estimated cost identified in Section B.2 will be the cost standard for comparison purposes in calculating the Incentive Fee.

B.2 ESTIMATED COST AND MAXIMUM INCENTIVE FEE

The estimated cost of this contract is \$. The incentive fee is \$. The total estimated cost and maximum incentive fee are \$.

	<u>Est. Cost</u>	<u>Max. Available Incentive Fee</u>	<u>Total Est. Cost and Max. Incentive Fee</u>
CLIN 1			
CLIN 2			
Total			

B.3 INCENTIVE FEE

The Government shall evaluate the Contractor's performance at three (3) month intervals from the date of contract award in accordance with Attachment B, Surveillance and Cost Plus Incentive Fee Plan, of the contract. The Contractor's reporting requirements for this evaluation are specified therein. The quality, schedule and cost metrics that the Contractor will be measured against in determining earned incentive fee are defined in the Statement of Work.

B.4 CONTRACT FUNDING (NASA 1852.232-81) (JUN 1990)

(a) For purposes of payment of cost, exclusive of fee, in accordance with the Limitation of Funds clause, the total amount allotted by the Government to this contract is \$210,850. This allotment is

for Electronics Fabrication and Electronic Equipment Support and covers the following estimated period of performance: May 1, 1998 through June 1, 1998.

(b) An additional amount of \$0 is obligated under this contract for payment of fee.

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 STATEMENT OF WORK - ELECTRONICS FABRICATION AND ELECTRONIC EQUIPMENT CONTRACT

Introduction

This Statement of Work (SOW) covers the general requirements for Electronics Fabrication and Electronic Equipment support at the Langley Research Center (LaRC). The majority of the effort shall be performed in a Contractor-furnished facility. Some work will be performed at LaRC, primarily in those instances where equipment or other items to be worked on, or with, are located at LaRC, and other sites as designated by work requests. In responding to LaRC work requests, the Contractor must meet strict research schedules. The Contractor shall respond to LaRC emergency requirements in all statement of work areas on a 24 hours, 7 days a week basis. The Contractor shall respond to LaRC emergency requirements within 1-hour after receiving notification of the request from the Government. "Response" is defined as having personnel working on-site at the NASA LaRC facility. The Contractor shall furnish all personnel, services, materials, equipment, vehicles, and facilities (other than those provided by the Government) necessary and/or incidental to the performance of the functional work areas identified below.

Quality Assurance

1. The Contractor shall utilize a quality assurance program that is in compliance with the requirements of the current version of the International Organization for Standardization's ISO 9002 Standard Series or the American National Standards Institute/American Society for Quality Control's Q9002 Series, or equivalent.

2. In performing the prescribed electronics fabrication services and quality assurance inspections, the Contractor shall comply with the quality provisions set forth in NASA Assurance Standards Publications NAS/NHB 5300.4 Series (latest version) or NASA approved standard and as specified in work requests. Personnel qualifications and certifications shall be in accordance with the training and certification requirements as set forth by the NASA Assurance Standards Publications.

3. The following summarizes the quality assurance inspection process under CLIN 1, for Tasks 1.1-3 of this Statement of Work. Additional/special inspection instructions may be given in individual work requests. The Contractor shall inspect all work prior to delivery to insure compliance with the NAS/NHB 5300.4 series and/or work request. A written inspection report shall be delivered with the completed item on a Quality Assurance Control Card (Form FD-EFDB N-969) along with a Shipping Receipt (Form FD-686). A NASA quality assurance inspector or other authorized NASA representative (as designated on work request) will inspect the completed deliverable and either accept or reject the item. Completed items/repairs delivered under CLIN 1, Task 1.4 and CLIN 2 will be delivered to the NASA requester for final inspection and acceptance. All rejected items will be documented and returned to the Contractor for rework.

CLIN 1.0 ELECTRONICS FABRICATION SUPPORT

The Contractor shall provide technical support to fabricate research-oriented electronics circuitry. This includes circuit assemblies for ground support, aircraft, spaceflight, laboratory, and research test facility instrumentation requirements. Work shall encompass four (4) functional work areas: general, aircraft, and micro electronics fabrication, and special fabrication processes as described herein.

The Contractor shall work from work requests which may include schematics, assembly drawings, sketches, wiring diagrams, and/or written narratives describing the work to be performed along with any special fabrication operations, procedures, and techniques. Electronics fabrication support shall include but not be limited to the following services as directed by work requests:

- Layout of parts, wiring, fabrication, installation, functional checkout, and modification of electronics circuitry
- Installation of parts/components (including both surface mount and through hole devices) such as resistors, capacitors, coils, transistors, integrated circuits, etc. in printed circuit board assemblies
- Routing and soldering of wires to form circuitry
- Soldering of cable wires to specified terminals to connect circuits and subassemblies
- Machining and painting of miscellaneous hardware such as panels, chassis, and cabinets
- Quality assurance functions including checking continuity of circuits using circuit analyzers; performing quality assurance inspection of components, assemblies, and completed instrumentation systems; analyzing problems encountered and documenting all inspections and tests performed; recording of nonconformances, rejections, reworks, and repairs; integrating Government-provided subassembly drawings/specifications to form detailed schematic of completed task; and assuring compliance of end items with the NASA Assurance Standards Publications.

1.1 General Electronics Fabrication - The Contractor shall provide electronics fabrication support to produce general electronics circuitry and hardware. Requirements range from fabrication and assembly of printed circuit boards, cable assemblies, wiring harnesses, and electronics chassis; to installation and wiring of complete research test facilities; to fabrication and assembly of electronics hardware components and subsystems for Center aeronautical or aerospace research projects. Approximately 70 percent of the work will be performed in a Contractor-furnished facility; approximately 30 percent of the work will be performed at various LaRC work sites as required.

1.2 Aircraft Electronics Fabrication - The Contractor shall operate a Government-furnished electronics fabrication shop in LaRC's Building 1244 Hangar and shall provide electronics fabrication support to produce aircraft electronics circuitry such as data acquisition instrumentation, telemetry systems, electronic display units, and a variety of ground support equipment for LaRC's flight research aircraft. Work will be performed in LaRC's Building 1244 Hangar and on-board the various research aircraft.

1.3 Microelectronics Fabrication - The Contractor shall provide electronics fabrication support to produce microelectronics circuitry. This includes the performance of technical functions necessary for microelectronic circuit and sensor fabrication such as deposition of materials, photochemical patterning of circuit elements and interconnections, mounting of microminiature components, etc. The specialized microelectronics facilities and equipment necessary for performance of this work are located in LaRC's Building 1238 Microelectronics Laboratory and shall be provided for use by the Contractor.

1.4 Special Fabrication Processes - The Contractor shall perform a variety of special fabrication processes including but not limited to the following:

- Photoplotting, photographing, and processing of printed circuit board electronic artwork data files. The Contractor shall utilize these processes to produce printed circuit board artwork film plots. (In producing the required film plots, the Contractor shall electronically interface with the Government in an automated fashion utilizing compatible standard electronic file formats.)
- Printed circuit board fabrication. (The Government may issue up to ten (10) work requests per contract year for fabrication of printed circuit boards from Government-provided schematics/artwork.)

- Graphics-related processes including computerized engraving and vinyl cutting; metal-photo imaging; and graphics artwork layout, screen-printing, decaling, and transfer lettering. The Contractor shall utilize these processes to: fabricate and install miscellaneous signage such as building/room identification signs, nameplates, tags, and other placards; produce highly-durable plaques, plates, and panels; and label /identify instrumentation panels, chassis, cabinets, printed circuit boards, etc.
- Coatings application processes including conformal coating, staking, encapsulating and other processes related to the application of protective coatings to printed circuit boards and electronic assemblies.

Approximately 95 percent of the work involving special fabrication processes will be performed in a Contractor-furnished facility; approximately 5 percent of the work will be performed at various LaRC work sites as required.

1.5 Metrics - The Quality and Schedule metrics are applicable to Tasks 1.1-3.

Task 1.4 may be measured against Quality and/or Schedule Metrics on a case-by-case basis and will be noted accordingly on the work request. The cost metric is applicable to all tasks under CLIN 1.

- **Quality** -- Conformance with NASA Assurance Standards Publications NAS/NHB 5300.4 Series is required. All specifications (assembly drawings, wiring diagrams, sketches, special fabrication procedures and techniques etc.) identified in individual work requests must be met. "Quality Sensitive" represents those work requests that a quality error could impact overall project objective(s) or milestones.
- **Schedule** -- A specific completion date will be defined for each work request. Work requests designated with a "Must Hold" represents those work requests that could severely impact overall project objective(s) or milestones if the delivery date is not met. A "Must Hold" work request will be considered late if the article is delivered to the NASA Quality Office or other designated delivery site, or is available for customer pickup after the close of business on the required delivery date.
- **Cost** -- The negotiated cost for each work request established utilizing the contract hourly labor rate per labor category will serve as the cost standard.

CLIN 2.0 ELECTRONIC EQUIPMENT SUPPORT

2.1 This requirement is on going and shall begin on the effective date of the contract and continue without interruption through the period of performance of the contract. The Contractor shall provide electronic equipment support to include the installation, repair, maintenance, assembly, modification, setup, operation, and testing of a variety of Government-owned Computer Numerical Control (CNC) and conventional machinery and equipment including but not limited to the equipment listed in Exhibit H. Additionally, the Contractor shall provide annual calibration of selected machine tool equipment including but not limited to the equipment listed in Exhibit H, List 2. The overall electronic equipment effort supports LaRC's Fabrication Division (FD). The reliable operation of CNC and conventional machinery and equipment is critical to the mission of the FD. The equipment to be serviced are located in three primary FD facilities: Building 1225, Advanced Machining Development Lab; Building 1283B, Engineering and Fabrication Lab; and Building 1238B, Composite and Models Development Lab. Ninety percent of the tasks are 10 hours or less in duration.

2.2 Metrics

- **Quality**--Completion of work without Contractor error. A task completed with a Contractor error is identified as a "Call Back". "Call Backs" are defined as a

request to re-repair equipment that after being repaired by the Contractor, has subsequently failed/malfunctioned as a result of an unsatisfactory initial repair by the Contractor.

- Schedule--Equipment "Down Time" shall serve as a measure of the timeliness of the Contractor's efforts in effecting repairs. "Down Time" is the period of time a machine is out of service while awaiting/undergoing repairs and shall include the period of time from receipt of repair request to completion of repair and restoration of machine to service.
- Cost--The negotiated cost for CLIN 2 (See B.2) broken out on a quarterly basis will serve as the cost standard.

SECTION E - INSPECTION AND ACCEPTANCE

E.1 FINAL INSPECTION AND ACCEPTANCE (LaRC 52.246-94) (OCT 1992)

Final inspection and acceptance of all items specified for delivery under this contract shall be accomplished by the Contracting Officer or his duly authorized representative at destination as specified in the Statement of Work and work requests.

SECTION F - DELIVERIES OR PERFORMANCE

F.1 PERIOD OF PERFORMANCE (LaRC 52.211-91) (AUG 1997)

The period of performance of this contract shall be 12 months from the effective date of the contract.

F.2 PLACE OF DELIVERY (LaRC 52.211-92) (OCT 1992)

Delivery shall be f.o.b. destination:

As specified in work requests.

F.3 PLACE(S) OF PERFORMANCE (LaRC 52.211-98) (OCT 1992)

The place(s) of performance shall be at the Contractor's facility, NASA, Langley Research Center, Hampton, Virginia; and other sites as may be designated by work requests.

SECTION G - CONTRACT ADMINISTRATION DATA

G.1 TECHNICAL DIRECTION (NASA 1852.242-70) (SEP 1993)

(a) Performance of the work under this contract is subject to the written technical direction of the Contracting Officer's Technical Representative (COTR), who shall be specifically appointed by the Contracting Officer in writing in accordance with NASA FAR Supplement 18-42.270. "Technical direction" means a directive to the Contractor that approves approaches, solutions, designs, or refinements; fills in details or otherwise completes the general description of work or documentation items; shifts emphasis among work areas or tasks; or furnishes similar instruction to the Contractor. Technical direction includes requiring studies and pursuit of certain lines of inquiry regarding matters within the general tasks and requirements in Section C of this contract.

(b) The COTR does not have the authority to, and shall not, issue any instructions purporting to be technical direction that -

- (1) Constitutes an assignment of additional work outside the statement of work;
- (2) Constitutes a change as defined in the changes clause;

- (3) In any manner causes an increase or decrease in the total estimated contract cost, the fixed fee (if any), or the time required for contract performance;
 - (4) Changes any of the expressed terms, conditions, or specifications of the contract; or
 - (5) Interferes with the Contractor's rights to perform the terms and conditions of the contract.
- (c) All technical direction shall be issued in writing by the COTR.
- (d) The Contractor shall proceed promptly with the performance of technical direction duly issued by the COTR in the manner prescribed by this clause and within the COTR's authority. If, in the Contractor's opinion, any instructions or direction by the COTR falls within any of the categories defined in paragraph (b) above, the Contractor shall not proceed but shall notify the Contracting Officer in writing within 5 working days after receiving it and shall request the Contracting Officer to take action as described in this clause. Upon receiving this notification, the Contracting Officer shall either issue an appropriate contract modification within a reasonable time or advise the Contractor in writing within 30 days that the instruction or direction is -
- (1) Rescinded in its entirety; or
 - (2) Within the requirements of the contract and does not constitute a change under the changes clause of the contract and that the Contractor should proceed promptly its performance.
- (e) A failure of the Contractor and Contracting Officer to agree that the instruction or direction is both within the requirements of the contract and does not constitute a change under the changes clause, or a failure to agree upon the contract action to be taken with respect to the instruction or direction shall be subject to the Disputes clause of this contract.
- (f) Any action(s) taken by the Contractor in response to any direction given by any person other than the Contracting Officer or the COTR shall be at the Contractor's risk.

G.2 NASA CONTRACTOR FINANCIAL MANAGEMENT REPORTING (NASA 1852.242-73) (JUL 1997)

- (a) The Contractor shall submit NASA Contractor Financial Management Reports on NASA Forms 533 in accordance with the instructions in NASA Policy Guidance (NPG) 9501.2, NASA Contractor Financial Management Reporting, and on the reverse side of the forms, as supplemented in the Schedule of this contract. The detailed reporting categories to be used, which shall correlate with technical and schedule reporting, shall be set forth in the Schedule. Contractor implementation of reporting requirements under this clause shall include NASA approval of the definitions of the content of each reporting category and give due regard to the Contractor's established financial management information system.
- (b) Lower level detail used by the Contractor for its own management purposes to validate information provided to NASA shall be compatible with NASA requirements.
- (c) Reports shall be submitted in the number of copies, at the time, and in the manner set forth in the Schedule or as designated in writing by the Contracting Officer. Upon completion and acceptance by NASA of all contract line items, the Contracting Officer may direct the Contractor to submit Form 533 reports on a quarterly basis only, report only when changes in actual cost incur, or suspend reporting altogether.
- (d) The Contractor shall ensure that its Form 533 reports include accurate subcontractor cost data, in the proper reporting categories, for the reporting period.
- (e) If during the performance of this contract NASA requires a change in the information or reporting requirements specified in the Schedule, or as provided for in Paragraph (a) or (c) of this clause, the Contracting Officer shall effect that change in accordance with the Changes clause of this contract.

G.3 SUBMISSION OF VOUCHERS FOR PAYMENT (NASA 1852.216-87) (DEC 1988)

- (a) Public vouchers for payment of costs shall include a reference to this contract NAS1-98110, your Taxpayer Identification Number and be forwarded thru:

NASA Langley Research Center
Attn: Financial Management Division, MS 175
Hampton, VA 23681-0001

This is the designated billing office for cost and fee vouchers for purposes of the Prompt Payment clause of this contract. Payments of cost will be made in monthly installments. Cost and fee vouchers are to be submitted separately.

Cost vouchers shall be submitted through the delegated Government Audit Agency identified as follows, with a copy to the delegated Administrative Contracting Officer:

DCAA, Raytheon Service Company
2 Wayside Road
Berlington, MA 01803

(b) The Contractor shall prepare vouchers as follows:

- (1) One original Standard Form (SF) 1034, SF 1035, or equivalent Contractor's attachment.
- (2) Seven copies of SF 1034A, SF 1035A, or equivalent Contractor's attachment.
- (3) The Contractor shall mark SF 1034A copies 1, 2, 3, 4, and such other copies as may be directed by the Contracting Officer by insertion in the memorandum block the names and addresses as follows:
 - (i) Copy 1 NASA Contracting Officer;
 - (ii) Copy 2 Auditor;
 - (iii) Copy 3 Contractor
 - (iv) Copy 4 Contract administration office; and

(c) Public vouchers for payment of fee shall be prepared similarly and be forwarded thru [3] to:

NASA Langley Research Center
Attn: Contracting Officer, Mail Stop 126
Hampton, VA 23681-0001

(d) In the event that amounts are withheld from payment in accordance with provisions of this contract, a separate voucher for the amount withheld will be required before payment for that amount may be made.

G.4 WORK REQUESTS

A. The work to be performed under CLIN1, Electronics Fabrication Support of Section C, Description/ Specifications/Work Statement, will be more specifically directed by means of written Work Requests issued by the Contracting Officer (CO), Contracting Officer's Technical Representative (COTR) or Authorized Government Representative and will contain the following information:

1. Date and Work Request Number
2. Special Designations i.e. Quality Sensitive, Must Hold
3. Description of work, specifications and/or end item
4. Name of NASA originator
5. Quantity
6. Required Schedule
7. Final Cost Estimate
8. Applicable special instructions i.e. Delivery Site, Required Quality Assurance Inspection

B. A complete work package consisting of the items identified in paragraph A above will be submitted to the Contractor for review. The CO, COTR or authorized representative will negotiate any necessary changes with the Contractor. Once mutual agreement is made on the conditions of the work package, an official work request will be issued to the Contractor on a Form FD-EFDB N-1395 or equivalent. The final cost estimate specified in the work request will serve as the cost standard for that work. If, after the Contractor has started the work it becomes necessary for the Government to make technical changes that affect the overall scope of the work request, the cost estimate and/or schedule shall be renegotiated to reflect the change in scope. The renegotiated cost estimate and/or schedule shall become the new standard for that work. The quality, schedule and cost metrics are addressed in the Statement of Work and work requests as applicable. The Contractor shall acknowledge receipt and acceptance of the work request by a signed Acknowledgment/Acceptance form or equivalent and return it to the COTR.

C. The Contractor shall respond within one hour of notification, for emergency requirements. The Contractor shall designate a primary individual point of contact that can be notified of emergency requirements 24 hours per day. The Contractor shall accept verbal orders of emergency services from the COTR or authorized representative. Written directions through a work request, following the above process in Paragraph B, will be provided within 2 working days.

D. The Contractor shall furnish a control and reporting system capable of accurately maintaining data required for the submission of reporting requirements identified in Exhibits A and B of the contract.

G.5 LIST OF GOVERNMENT-FURNISHED PROPERTY (NASA 1852.245-76) (OCT 1988)

For the performance of work under this contract, the Government will make available Government property identified in Exhibit G of this contract on a no-charge-for-use basis. The Contractor shall use this property in the performance of this contract at the Contractor's facility and at other location(s) as may be approved by the Contracting Officer. Under the FAR 52.245-5 Government Property clause of this contract, the Contractor is accountable for the identified property.

G.6 LIST OF INSTALLATION-ACCOUNTABLE PROPERTY AND SERVICES (NASA 1852.245-77) (JUL 1997)

In accordance with the clause at 1852.245-71, Installation-Accountable Government Property, the Contractor is authorized use of the types of property and services listed below, to the extent they are available, in the performance of this contract within the physical borders of the installation which may include buildings and space owned or directly leased by NASA in close proximity to the installation, if so designated by the Contracting Officer.

(a) Office space, work area space, and utilities. Government telephones are available for official purposes only.

(b) General- and special-purpose equipment, including office furniture.

(1) Equipment to be made available is listed in Exhibit F. The Government retains accountability for this property under the clause at 1852.245-71, Installation-Accountable Government Property, regardless of its authorized location.

(2) If the Contractor acquires property, title to which vests in the Government pursuant to other provisions of this contract, this property also shall become accountable to the Government upon its entry into Government records as required by the clause at 1852.245-71, Installation-Accountable Government Property.

(3) The Contractor shall not bring to the installation for use under this contract any property owned or leased by the Contractor, or other property that the Contractor is accountable for under any other Government contract, without the Contracting Officer's prior written approval.

(4) All equipment necessary to perform in the areas of Aircraft Electronics Fabrication and Microelectron Fabrication.

(c) General (excluding office supplies) and electronic supplies from store stock.

(d) Publications and blank forms stocked by the installation.

(e) Safety and fire protection for Contractor personnel and facilities.

(f) Medical treatment of a first-aid nature for Contractor personnel injuries or illnesses sustained during on-site duty.

(g) Cafeteria privileges for Contractor employees during normal operating hours.

(h) Building maintenance for facilities occupied by Contractor personnel.

(i) Moving and hauling for office moves, movement of large equipment, and delivery of supplies. Moving services shall be provided on-site, as approved by the Contracting Officer.

(j) The user responsibilities of the Contractor are defined in paragraph (a) of the clause at 1852.245-71, Installation-Accountable Government Property.

G.7 PROVIDING FACILITIES TO CONTRACTORS (LaRC 52.245-90) (AUG 1997)

A. In accordance with FAR 45.302-1, it is policy of the Government that Contractors shall furnish all facilities required for performing Government contracts. "Facilities" include real property and plant equipment including personal property such as general purpose off-the-shelf equipment, machine tools, test equipment, furniture and vehicles. "Facilities" do not include material, special test equipment, special tooling or agency-peculiar property.

B. In keeping with the policy set forth in FAR 45.302-1, the Government will not provide NEW "facilities," except as provided for in the Statement of Work.

C. However, the Government will provide EXISTING facilities as listed in G.5 and 6 and Exhibits F and G. Any of these existing facilities that reach the end of their useful life during the contract period, or which are beyond economical repair, shall be replaced by the Contractor, if the facilities are still needed for contract performance.

D. Notwithstanding the "Allowable Cost and Payment" clause of this contract, cost of facilities are not an allowable cost except when charged to this contract in accordance with your approved accounting system.

G.8 CONTRACT CLOSEOUT (LaRC 52.242-90) (JUN 1988)

A. Reassignment--After receipt, inspection, and acceptance by the Government of all required articles and/or services, and resolution of any pending issues raised during the Period of Performance, this contract will be reassigned to the NASA Langley Research Center Contracting Officer for Contract Closeout. All transactions subsequent to the physical completion of the contract should, therefore, be addressed to the said Contracting Officer at NASA Langley Research Center, Mail Stop 126, who may be reached by telephone at (757) 864-7765.

B. "Quick Closeout"--Paragraph (f) of the Allowable Cost and Payment clause of this contract addresses the "Quick Closeout Procedure" delineated by Subpart 42.7 of the Federal Acquisition Regulation (FAR). It should be understood that the said procedure applies to the settlement of indirect costs for a specific contract in advance of the determination of final indirect cost rates when the amount of unsettled indirect cost to be allocated to the contract is relatively insignificant. Therefore, the "Quick Closeout" procedure does not preclude the provisions of paragraph (d) of the Allowable Cost and Payment clause nor does it constitute a waiver of final audit of the Contractor's Completion Voucher.

C. Completion Voucher Submittal--Notwithstanding the provisions of the Allowable Cost and Payment clause, as soon as practicable after settlement of the Contractor's indirect cost rates applicable to performance of the contract, the Contractor shall submit a Completion Voucher as required by the aforesaid clause. The Completion Voucher shall be supported by a cumulative claim and reconciliation statement and executed NASA Forms 778, Contractor's Release, and 780, Contractor's Assignment of Refunds, Rebates, Credits, and Other Amounts. Unless directed otherwise by the Contracting Officer for Contract Closeout, the Contractor shall forward the said Completion Voucher directly to the cognizant Government Agency to which audit functions under the contract have been delegated.

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (FAR 52.222-42) (MAY 1989)

In compliance with the Service Contract Act of 1965, as amended, and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

THIS STATEMENT IS FOR INFORMATION ONLY: IT IS NOT A WAGE DETERMINATION

<u>Employee Class</u>	<u>Monetary Wage</u>
Engineering Technician II (CLIN 1)	
Engineering Technician I (CLIN 1)	
Engineering Technician III (CLIN 2)	
Engineering Technician II (CLIN 2)	

FRINGE BENEFITS

<u>Annual Leave</u>	-
<u>Sick Leave</u>	-
<u>Holidays</u>	-
<u>Health Insurance</u>	-
<u>Group Life Insurance</u>	- Government pays up to 60% of health insurance..
<u>Retirement</u>	-

Part-time Federal employees receive pro rata annual leave, sick leave, holiday leave, health insurance, and group life insurance benefits based on the number of hours worked.

H.2 OPTIONS

Priced Options/Extended Term

Pursuant to the Section I clause entitled "Option to Extend the Term of the Contract (MAR 1989)," the Contractor hereby grants to the Government options to extend the term of the contract for four additional periods of twelve months each. Such options are to be exercisable by issuance of a unilateral modification. Upon exercise of such option(s) by the Government, the following items will be increased by the amount specified below for each option period.

<u>Item</u>	<u>First Option Period</u>	<u>Second Option Period</u>	<u>Third Option Period</u>	<u>Fourth Option Period</u>
Period of Performance (Ref. F.1)	12 months	12 months	12 months	12 months
Fully Burdened Rate Per Hour (Ref. B.1.B)				
Engineering Technician II (CLIN 1)				
Engineering Technician I (CLIN 1)				
Overtime Fully Burdened Rate Per Hour (Ref. B.1.B)				
Engineering Technician II (CLIN 1)				
Engineering Technician I (CLIN 1)				
Estimated Cost (Ref. B.2)				
CLIN 1				
CLIN 2				
Incentive Fee (Ref. B.2)				
CLIN 1				
CLIN 2				

H.3 CONTRACTOR EMPLOYEE'S SECURITY CLEARANCE (LaRC 52.204-90) (OCT 1996)

By virtue of their particular work assignment, certain Contractor employees, may be required to have a security clearance granted in accordance with the National Industry Security Program Operating Manual (NISPO) dated March 14, 1996. Clearances will be issued by the Department of Defense (DOD). Within 10 working days after an employee is identified by the Government and/or the Contractor as requiring a SECRET or higher clearance, the Contractor shall submit to the Contracting Officer evidence of the submittal of a request for clearance to DOD for such employee. If the clearance for an employee has not been issued by DOD within 120 calendar days of the submittal of the request for clearance to DOD, the Contractor may be required to remove the employee from the contract.

H.4 SECURITY PROGRAM/FOREIGN NATIONAL EMPLOYEE INVESTIGATIVE REQUIREMENTS (LaRC 52.204-91) (AUG 1997)

Prior to reporting to Langley Research Center (LaRC) to perform under a contract or grant, each Foreign National shall have approval for access to LaRC facilities from NASA Headquarters, Office of Space Science and Aeronautics (Code IS). A copy of the access authorization request shall be provided to the LaRC Chief of Security. Additionally, an investigation by the Government shall be completed on each Foreign National contractor prior to reporting to LaRC to perform under a contract or grant. A properly executed "Name Check Request" (NASA Form 531) and a completed "applicant" fingerprint card shall be submitted to the LaRC Security Office, Mail Stop 182, for each Foreign National contractor at least 75 days prior to the estimated entry on duty date. The NF 531 and fingerprint card may be obtained from the LaRC Security Office. If the access approval is obtained from NASA Headquarters prior to completion of the investigation, and the Contracting Officer requires a Foreign National to work on LaRC, an escort request may be considered by the LaRC Chief of Security.

H.5 WORK SCHEDULE--ON-SITE ONLY (LaRC 52.211-103) (JUL 1991)

In order that the necessary and proper inspection of the Contractor's work may be effectively accomplished, and to assure the availability of required Government interface, the Contractor shall schedule work performance hereunder so as to be compatible with the established workweek and hours of work observed by the Government organization having cognizance over the work being performed, which is 6:30 a.m. to 3:00 p.m., Monday through Friday.

H.6 OBSERVATION OF REGULATIONS AND IDENTIFICATION OF CONTRACTOR'S EMPLOYEES (LaRC 52.211-104) (MAR 1992)

A. Observation of Regulations--In performance of that part of the contract work which may be performed at Langley Research Center or other Government installation, the Contractor shall require its employees to observe the rules and regulations as prescribed by the authorities at Langley Research Center or other installation.

B. Identification Badges--At all times while on LaRC property, the Contractor shall require its employees, subcontractors and agents to wear badges which will be issued by the NASA Contract Badge and Pass Office, located at 1 Langley Boulevard (Building No. 1228). Badges shall be issued only between the hours of 6:30 a.m. and 4:30 p.m., Monday through Friday. Contractors will be held accountable for these badges, and may be required to validate outstanding badges on an annual basis with the NASA LaRC Security Office. Immediately after employee termination or contract completion, badges shall be returned to the NASA Contract Badge and Pass Office.

H.7 INCORPORATION OF SECTION K OF THE PROPOSAL BY REFERENCE (LaRC 52.215-107) (MAR 1989)

Pursuant to FAR 15.406-1(b), the completed Section K of the proposal dated January 16, 1998, is hereby incorporated herein by reference.

H.8 VIRGINIA AND LOCAL SALES TAXES (LaRC 52.229-92) (APR 1992)

To perform this contract, the Contractor must be knowledgeable of relevant state and local taxes when making purchases of tangible personal property. The Contractor shall refrain from paying nonapplicable taxes or taxes where an exemption exists, but shall pay applicable taxes that are reimbursable pursuant to FAR 31.205-41, Taxes. Even though title to property purchased under this contract may pass to the Government and the price is reimbursable under contract cost principles, such transactions do not in themselves provide tax immunity to the Contractor. Therefore, within 30 days after the effective date of this contract, the Contractor shall request from the Virginia State Tax Commission a ruling on any tax exemptions that may be applicable to purchases made under this contract. The Contractor shall provide all facts relevant to the situation and shall pursue an interpretation of the law that is most favorable to both the Contractor and the Government.

H.9 ADVANCE AGREEMENT ON INDIRECT RATE(S) (LaRC 52.231-90) (JUN 1988)

A. Notwithstanding the provisions of the Section I clause entitled "Allowable Cost and Payment," the Contractor will be reimbursed at the indirect ceiling rates specified below or the actual rates, whichever are less, for each of the Contractor's fiscal years applicable to this contract. The Contractor's fiscal year is January 1 to December 31. Any costs that are not reimbursed due to the ceilings shall be deemed unallowable costs. These unallowable costs shall not be recovered under this or any other Government contract.

Indirect Cost Pool

Ceiling Percentage

Allocation Base

B. The above rate ceilings are predicated upon the bases listed above and the accounting practices and accounting system in effect on January 16, 1998. If the Contractor changes its accounting practices or accounting system in any way, the Contractor will immediately notify the Government. Within 30 days of such change the Contractor shall present to the Contracting Officer information that demonstrates that the change will not impact the allowable cost computed using the above rates or shall submit a proposal for adjustment of the ceilings so that the total costs allowable will not exceed the total costs that would have been allowable had the Contractor not changed its accounting practices or accounting system. In the event that the parties cannot agree on new ceilings using the Contractor's new accounting practices or system and the Contractor does not agree to return to the previous accounting practices and system, the Contracting Officer may equitably adjust the ceilings.

C. The limitation(s) on indirect cost rates set forth above consider all known indirect costs that will occur during the term of this contract. However, after contract award, should there be changes to statutes, court decisions and/or written ruling or regulation by the Internal Revenue Service or any other taxing authority, or wage determination and/or regulations issued by the Department of Labor pursuant to the provisions of the Services Contract Act of 1965, as amended, that affect the Contractor's indirect costs, the above limitation(s) on indirect cost rates may be adjusted by the Contracting Officer to the extent that such changes cause an increase or a decrease to the Contractor's indirect costs.

H.10 QUALITY MANAGEMENT SYSTEM REQUIREMENTS (ISO-9000)

No later than 12 months after award of the contract, the Contractor shall be certified by a third-party registrar as compliant with the current version of the International Organization for Standardization's "ISO 9002" Standard Series or the American National Standards Institute/American Society for Quality Control's "Q9002 Series" and associated documentation. The Contractor shall maintain their registration during the contract term.

H.11 COMPUTER SOFTWARE AND SYSTEMS

The Contractor warrants that the items or services acquired under this contract are required to include accurate processing of the date and date-related data including, but not limited to, calculating, comparing, sequencing, and the manipulation of data with dates prior to, through, and beyond January 1, 2000. This capability must be included in all hardware and software products delivered under this contract, or used to perform services required by the contract, individually and in combination, and shall be transparent to the user. Hardware and software products provided under this contract, and used to perform services required by the contract, shall individually, and in combination, be able to successfully transition into the Year 2000 with the correct system date, including leap year calculations, without human intervention. Such products shall also provide correct results when moving forward and backward in time across the Year 2000 and subsequent years.

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

I.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE:

NOTICE: The following solicitation provisions and/or contract clauses pertinent to this section are hereby incorporated by reference.

FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES

<u>CLAUSE NUMBER</u>	<u>TITLE AND DATE</u>
52.202-1	Definitions (OCT 1995)
52.203-3	Gratuities (APR 1984)
52.203-5	Covenant Against Contingent Fees (APR 1984)
52.203-6	Restrictions on Subcontractor Sales to the Government (JUL 1995)
52.203-7	Anti-Kickback Procedures (JUL 1995)
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (JAN 1997)
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity (JAN 1997)
52.203-12	Limitation on Payments to Influence Certain Federal Transactions (JUN 1997)
52.204-2	Security Requirements (AUG 1996)
52.204-4	Printing/Copying Double-Sided on Recycled Paper (JUN 1996)
52.209-6	Protecting the Government's Interest when Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment (JUL 1995)
52.211-5	Material Requirements (OCT 1997)
52.211-7	Other Than New Material, Residual Inventory, and Former Government Surplus Property (MAY 1995)
52.211-15	Defense Priority and Allocation Requirements (OCT 1997)
52.215-2	Audit and Records—Negotiation (OCT 1997)
52.215-8	Order of Precedence (OCT 1997)
52.215-11	Price Reduction for Defective Cost or Pricing Data—Modifications (OCT 1997)
52.215-13	Subcontractor Cost or Pricing Data—Modifications (OCT 1997)
52.215-14	Integrity of Unit Prices (OCT 1997)
52.215-15	Termination of Defined Benefit Pension Plans (OCT 1997)
52.215-17	Waiver of Facilities Capital Cost of Money (OCT 1997)
52.215-18	Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other than Pensions (OCT 1997)
52.215-19	Notification of Ownership Changes (OCT 1997)
52.215-21	Requirements for Cost and Pricing Data or Information Other Than Cost or Pricing Data - Modifications (OCT 1997)
52.216-7	Allowable Cost and Payment (MAR 1997)
52.219-8	Utilization of Small, Small Disadvantaged, and Women-Owned Small Business Concerns (JUN 1997)
52.219-9	Small, Small Disadvantaged, and Women-Owned Small Business Subcontracting Plan (AUG 1996) Alternate II (MAR 1996)
52.219-16	Liquidated Damages - Subcontracting Plan (OCT 1995)
52.222-1	Notice to the Government of Labor Disputes (FEB 1997)
52.222-3	Convict Labor (AUG 1996)
52.222-4	Contract Work Hours and Safety Standards Act—Overtime Compensation (JUL 1995)
52.222-26	Equal Opportunity (APR 1984)
52.222-28	Equal Opportunity Preaward Clearance of Subcontracts (APR 1984)
52.222-35	Affirmative Action for Special Disabled and Vietnam Era Veterans (APR 1984)
52.222-36	Affirmative Action for Handicapped Workers (APR 1984)

52.222-37	Employment Reports on Special Disabled Veterans and Veterans of the Vietnam Era (JAN 1988)
52.222-41	Service Contract Act of 1965, As Amended (MAY 1989)
52.223-2	Clean Air and Water (APR 1984)
52.223-3	Hazardous Material Identification and Material Safety Data (Jan 1997) Alternate I (Jul 1995)
52.223-5	Pollution Prevention and Right-To-Know Information (MAR 1997)
52.223-6	Drug-Free Workplace (JAN 1997)
52.223-14	Toxic Chemical Release Reporting (OCT 1996)
52.225-3	Buy American Act - Supplies (JAN 1994)
52.225-11	Restrictions on Certain Foreign Purchases (OCT 1996)
52.225-19	European Union Sanction For Services (JAN 1996)
52.227-1	Authorization and Consent (JUL 1995)
52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement (AUG 1996)
52.227-11	Patent Rights--Retention by the Contractor (Short Form) (JUN 1989)--as modified by NASA FAR Supplement 1852.227-11
52.227-14	Rights in Data--General (JUN 1987)--as modified by NASA FAR Supplement 1852.227-14
52.228-7	Insurance—Liability to Third Persons (MAR 1996)
52.230-2	Cost Accounting Standards (APR 1996)
52.230-6	Administration of Cost Accounting Standards (APR 1996)
52.232-9	Limitation on Withholding of Payments (APR 1984)
52.232-17	Interest (JUN 1996)
52.232-22	Limitation of Funds (APR 1984)
52.232-23	Assignment of Claims (JAN 1986)
52.232-25	Prompt Payment (JUN 1997)
52.232-33	Mandatory Information for Electronic Funds Transfer Payment (AUG 1996)
52.233-1	Disputes (OCT 1995)--Alternate I (DEC 1991)
52.233-3	Protest After Award (AUG 1996)--Alternate I (JUN 1985)
52.237-2	Protection of Government Buildings, Equipment and Vegetation (APR 1984)
52.237-3	Continuity of Services (JAN 1991)
52.239-1	Privacy or Security Safeguards (AUG 1996)
52.242-1	Notice of Intent to Disallow Costs (APR 1984)
52.242-3	Penalties for Unallowable Costs (OCT 1995)
52.242-4	Certification of Final Indirect Costs (JAN 1997)
52.242-13	Bankruptcy (JUL 1995)
52.242-15	Stop-Work Order (AUG 1989)--Alternate I (APR 1984)
52.243-2	Changes--Cost-Reimbursement (AUG 1987)--Alternate II (APR 1984)
52.244-2	Subcontracts (Cost-Reimbursement and Letter Contracts) (FEB 1997)--Alternate I (AUG 1996)
52.244-5	Competition in Subcontracting (DEC 1996)
52.244-6	Subcontracts for Commercial Items and Commercial Components (OCT 1995)
52.245-5	Government Property (Cost-Reimbursement, Time-and-Material, or Labor-Hour Contracts) (JAN 1986)(DEVIATION) (JUL 1995)
52.246-3	Inspection of Supplies--Cost-Reimbursement (APR 1984)
52.246-5	Inspection of Services--Cost-Reimbursement (APR 1984)
52.246-25	Limitation of Liability--Services (FEB 1997)
52.248-1	Value Engineering (MAR 1989)
52.249-6	Termination (Cost-Reimbursement) (SEP 1996)
52.249-14	Excusable Delays (APR 1984)
52.251-1	Government Supply Sources (APR 1984)
52.252-6	Authorized Deviations in Clauses (APR 1984)
52.253-1	Computer Generated Forms (JAN 1991)

NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

<u>CLAUSE NUMBER</u>	<u>TITLE AND DATE</u>
1852.208-81	Restrictions on Printing and Duplicating (AUG 1993)
1852.216-89	Assignment and Release Forms (JUL 1997)
1852.219-74	Use of Rural Area Small Businesses (SEP 1990)
1852.219-75	Small, Small Disadvantaged, and Women-Owned Small Business Subcontracting Reporting (JUL 1997)
1852.219-76	NASA 8 Percent Goal (JUL 1997)
1852.223-70	Safety and Health (MAR 1997)
1852.223-74	Drug and Alcohol-Free Workforce (MAR 1996)
1852.228-75	Minimum Insurance Coverage (OCT 1988)
1852.237-70	Emergency Evacuation Procedures (DEC 1988)
1852.242-70	Technical Direction (SEP 1993)
1852.242-71	Travel Outside of the United States (DEC 1988)
1852.242-72	Observance of Legal Holidays (AUG 1992) — Alternate I (SEPT 1989) and Alternate II (SEP 1989)
1852.242-73	NASA Contractor Financial Management Reporting (JUL 1997)
1852.243-71	Shared Savings (MAR 1997)
1852.245-70	Contractor Requests for Government-Owned Equipment (JUL 1997)
1852.245-73	Financial Reporting of NASA Property in the Custody of Contractors (SEP 1996)

I.2 CLAUSES IN FULL TEXT

The clauses listed below follow in full text:

<u>CLAUSE NUMBER</u>	<u>TITLE AND DATE</u>
52.252-2	Clauses Incorporated by Reference (JUN 1988)
52.217-9	Option to Extend the Term of the Contract (MAR 1989)
52.222-2	Payment for Overtime Premiums (JUL 1990)
1852.204-75	Security Classification Requirements (SEP 1989)
1852.204-76	Security Requirements for Unclassified Automated Information Resources (SEP 1993)
1852.215-84	Ombudsman (OCT 1996)
1852.245-71	Installation-Accountable Government Property (JUL 1997)- Alternate I (MAR 1989)

I.3 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (JUN 1988)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

I.4 OPTION TO EXTEND THE TERM OF THE CONTRACT (FAR 52.217-9) (MAR 1989)

- (a) The Government may extend the term of this contract by written notice to the Contractor within the current period of performance.
- (b) If the Government exercises this option, the extended contract shall be considered to include this option provision.
- (c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 60 months.

I.5 PAYMENT FOR OVERTIME PREMIUMS (FAR 52.222-2) (JUL 1990)

- (a) The use of overtime is authorized under this contract if the overtime premium cost does not exceed zero or the overtime premium is paid for work -

(1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;

(2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;

(3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or

(4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall -

(1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;

(2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;

(3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and

(4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

I.6 SECURITY CLASSIFICATION REQUIREMENTS (NASA 1852.204-75) (SEP 1989)

Performance under this contract will involve access to and/or generation of classified information, work in a security area, or both, up to the level of Secret. See Federal Acquisition Regulation clause 52.204-2 in this contract and DD Form 254, Contract Security Classification Specification, Exhibit C.

I.7 SECURITY REQUIREMENTS FOR UNCLASSIFIED AUTOMATED INFORMATION RESOURCES (NASA 1852.204-76) (SEP 1993)

(a) In addition to complying with any functional and technical security requirements set forth in the schedule and the clauses of this contract, the Contractor shall initiate personnel screening checks and obtain user responsibility agreements, as required by this clause, for each Contractor employee requiring unescorted or unsupervised physical access or electronic access to the following limited or controlled areas, systems, programs and data:

Central Scientific Computing Complex (Building 1268)

(1) The Contractor shall submit a personnel security questionnaire (NASA Form 531, Name Check Request, for National Agency Check (NAC) investigations and Standard Form 85P, Questionnaire for Public Trust Positions, for specified sensitive positions) and a Fingerprint Card (FD-258 with NASA overprint in Origin Block) to the installation Security Officer for each Contractor employee who requires access. The required forms may be obtained from the installation security office. Employees may have finger-prints taken at the NASA Contract Badge and Pass Office, located at 1 Langley Boulevard (Building No. 1228), only between the hours of 6:30 a.m. and 4:30 p.m., Monday through Friday, or at any police department.

(i) Several months may be required for completion of complex personnel screening investigations. Background screening may not be required for employees with recent or current Federal Government investigations.

(ii) When employee access is necessary prior to completion of personnel screening, each Contractor employee requiring access may be considered for escorted access. The installation Security Officer will establish the eligibility of proposed escorts.

(2) The Contractor shall ensure that each Contractor employee requiring access executes any user responsibility agreements required by the Government prior to access. The Contractor shall provide signed copies of the agreements to the installation Security Officer for inclusion in the employee's security file. Unauthorized access is a violation of law and punishable under the provisions of 18 U.S.C. 1029, 18 U.S.C. 1030 and other applicable statutes.

(3) The Contractor shall notify the installation AIS Manager no later than the end of the day of the termination for cause of an authorized employee's access. The Contractor shall notify the COTR no later than 10 days after an authorized employee no longer requires access for any other type of termination. Verbal notifications shall be confirmed in writing within 30 days.

(b) The Contractor shall incorporate this clause in all subcontracts where the requirements identified in paragraph (a) of this clause are applicable to performance of the subcontract.

I.8 OMBUDSMAN (NASA 1852.215-84) (OCT 1996)

An ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and Contractors during the preaward and postaward phases of this acquisition. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman is not to diminish the authority of the Contracting Officer, the Source Evaluation Board, or the selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Therefore, before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the Contracting Officer for resolution. If resolution cannot be made by the Contracting Officer, interested parties may contact the installation ombudsman, Belinda Adams, direct inquiries to Sandra S. Ray at (757) 864-2428. Concerns, issues, disagreements, and recommendations which cannot be resolved at the installation may be referred to the NASA ombudsman, the Deputy Administrator for Procurement, Thomas S. Luedtke, at 202-358-2090. Please do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the Contracting Officer or as specified elsewhere in this document.

I.9 INSTALLATION-ACCOUNTABLE GOVERNMENT PROPERTY (NASA 1852.245-71) (JUL 1997) ALTERNATE I (MAR 1989)

(a) The Government property described in the clause at 1852.245-77, List of Installation-Provided Property and Services, shall be made available to the contractor on a no-charge basis for use in performance of this contract. This property shall be utilized only within the physical confines of the NASA installation that provided the property. Under this clause, the Government retains accountability for, and title to, the property, and the contractor assumes the following user responsibilities: User responsibilities in accordance with NASA Handbook NHB 4200.1, NASA Equipment Management Manual.

The Contractor shall establish and adhere to a system of written procedures for compliance with these user responsibilities. Such procedures must include holding employees liable, when appropriate, for loss, damage, or destruction of Government property.

(b)(1) The official accountable recordkeeping, physical inventory, financial control, and reporting of the property subject to this clause shall be retained by the Government and accomplished by the installation Supply and Equipment Management Officer (SEMO) and Financial Management Officer. If this contract provides for the contractor to acquire property, title to which will vest in the Government, the following additional procedures apply:

(i) The contractor's purchase order shall require the vendor to deliver the property to the installation central receiving area;

(ii) The contractor shall furnish a copy of each purchase order, prior to delivery by the vendor, to the installation central receiving area;

(iii) The contractor shall establish a record of the property as required by FAR 45.5 and 1845.5 and furnish to the Industrial Property Officer a DD Form 1149 Requisition and

Invoice/Shipping Document (or installation equivalent) to transfer accountability to the Government within 5 working days after receipt of the property by the contractor. The contractor is accountable for all contractor-acquired property until the property is transferred to the Government's accountability.

(iv) Contractor use of Government property at an off-site location and off-site subcontractor use require advance approval of the contracting officer and notification of the SEMO. The contractor shall assume accountability and financial reporting responsibility for such property. The contractor shall establish records and property control procedures and maintain the property in accordance with the requirements of FAR Part 45.5 until its return to the installation.

(2) After transfer of accountability to the Government, the contractor shall continue to maintain such internal records as are necessary to execute the user responsibilities identified in paragraph (a) and document the acquisition, billing, and disposition of the property. These records and supporting documentation shall be made available, upon request, to the SEMO and any other authorized representatives of the contracting officer.

(3) The contractor shall not utilize the installation's central receiving facility for receipt of Contractor-acquired property. However, the Contractor shall provide listings suitable for establishing accountable records of all such property received, on a quarterly basis, to the Contracting Officer and the Supply and Equipment Management Officer.

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

Exhibit A	Contract Documentation Requirements, 6 pages
Exhibit B	Surveillance and Cost Plus Incentive Fee (CPIF) Plan, 5 pages
Exhibit C	Contract Security Classification Specification, DD Form 254, 2 pages
Exhibit D	Register of Wage Determination and Fringe Benefits, July 2, 1997, 10 pages
Exhibit E	Subcontracting Plan, 11 pages
Exhibit F	Installation-Accountable Government Property, 4 pages
Exhibit G	List of Government-Furnished Property, 6 pages
Exhibit H	Computer Numerical Control (CNC) and Conventional Machinery and Equipment, 4 pages
Exhibit I	Monthly Progress Report for Socioeconomic Goals (Sample), 1 page

EXHIBIT A - CONTRACT DOCUMENTATION REQUIREMENTS

I. DOCUMENTATION PREPARATION/SUBMISSION INSTRUCTIONS

A. Financial Management Reports--The Contractor shall comply with the Section I clause of this contract entitled "NASA Contractor Financial Management Reporting" by monthly submission of NASA Form 533M. The form shall be prepared and submitted in accordance with the instructions set forth on the reverse side of the form and NASA Policy and Guidelines (NPG) 9501.2C, "NASA Contractor Financial Management Reportings," as further definitized below.

1. Due not later than the 10th operating day following the close of the Contractor's accounting period being reported.

2. Columns 7.b. and d. shall be completed using the time-phased financial baseline plan approved as part of the Management and Operations Plan.

3. Columns 8.a. and b. shall be completed using estimates (forecasts) for the succeeding two months.

4. Minimum reporting categories:

Labor Hours

Direct:

CLIN 1 (ST)

CLIN 1 (OT)

CLIN 2 (ST)

CLIN 2 (OT)

Subtotal:

Additional Labor

Total Direct Hours

Cost

Direct:

CLIN 1 (ST)

CLIN 1 (OT)

CLIN 2 (ST)

CLIN 2 (OT)

Subtotal

Additional Labor

Total Direct Labor

OH

OH Rate

ODC's Company Specific

Subcontract

CLIN 1 OT Premium

CLIN 2 OT Premium

Facility

Other

Total ODC's Company Specific

ODC's Gov. Specific

CLIN 1 Material

CLIN 2 Material

CLIN 1 Travel

CLIN 2 Travel

Total ODC Gov. Specific

G&A

G&A Rate

Total Cost

Incentive Fee

Total CPIF

5. Each 533M shall include a narrative explanation for variances exceeding 10 percent between planned hours and dollars and actual hours and dollars for each reporting category.

B. Quarterly Financial Management Report--The Contractor shall submit a quarterly financial report detailed by categories specified in A.4 above on NASA Form 533Q at times and in accordance with

the instructions contained on the reverse side of the form. The initial 533Q shall be submitted within 10 operating days after award of the contract.

C. Financial Baseline Plan--A time-phased financial baseline plan, detailing by month how you plan to incur costs for the period, shall be submitted for the first 12-month interval of the total five year contract period. Financial baseline plans for each of the remaining 12-month intervals shall be submitted within 10 days of the anniversary of the effective date of this contract. Financial baseline plan revisions resulting from the exercise of priced option hours shall be submitted 10 days following the effective date of the option being exercised. This plan shall include the periods by the cost categories specified in Paragraph A.4 above. The total estimated cost and level of effort reflected in the baseline plans must equal the contract values for the total contract period. The Financial Baseline Plan will be revised each time a contract modification is executed which increases or decreases the contract estimated cost for a reason other than an overrun. The Financial Baseline Plan shall not be revised to include overrun costs.

D. Safety and Health Plan--Within 30 calendar days after the effective date of the contract, the Contractor shall submit a detailed safety and health plan showing how the Contractor intends to protect the life, health, and well being of NASA and Contractor employees as well as property and equipment. This plan, as approved by the Contracting Officer, should contain, as a minimum the following:

1. Points of Contact and Responsibility--Organizational flow chart and description of responsibilities of each employee in your organization for safety.

2. Employee Safety Training, Certification and Programs--Detailed information on type of training required, parties responsible for certification, and outline of applicable regulations. Detail company programs which emphasize personal safety and motivate employees to be safety conscious.

3. LaRC Safety Policies/Procedures--Recognition of applicable LaRC safety policies and procedures such as Langley Handbook 1710.10, LaRC Red Tag System.

4. Accident Investigation and Reporting--Procedures for investigating and reporting accidents/incidents including immediate notification to the NASA LaRC Safety Manager of all injuries and damage to equipment or facilities. Process for initiating changes/corrective actions in response to NASA LaRC Notice of Contractor Violation for unsafe operations, improper equipment, and other activities in noncompliance with construction and environmental regulations.

5. Hazardous Operations--

- a. Description of hazardous operations involved in contract performance.

- b. Plans for apprising employees of all hazards to which they may be exposed.

- c. Proper conditions and precautions for safe use and exposure to hazardous operations. Include recognition of LHB 1710.12, Potentially Hazardous Materials.

6. People with Disabilities--In accordance with the Americans with Disabilities Act, the plans should specify that prior to assigning a person with disabilities to this contract, the Contractor shall contact the Disability Program Manager at (804) 864-7718.

7. Other Safety Considerations--Any other safety considerations unique to your operation.

E. Quality Plan--Within 30 calendar days after the effective date of the contract, the Contractor shall submit a quality plan which addresses how the contract quality requirements will be met.

The Plan and subsequent revisions will be reviewed and approved by the Contracting Officer or the designated representative.

F. Monthly Progress Report--The Contractor shall submit a monthly progress report summarizing work progress, manpower utilization for assigned work requests, and material expenditures. This report shall be submitted within 10 operating days following the end of the reporting period.

G. Quarterly Equipment Report--The Contractor shall submit a Quarterly Government-furnished Equipment Report summarizing maintenance/calibration performed on the equipment. This report shall be submitted within 10 operating days following the end of the reporting period.

H. Quarterly Accident/Injury Report--The Contractor shall submit a Quarterly Accident/Injury Report within 10 operating days after the end of each quarter.

I. Collective Bargaining Agreements--The Contractor shall provide the Contracting Officer with copies of any collective bargaining agreements, and amendments thereto, which arise during the course of the contract and which apply to Contractor employees assigned to the contract.

J. Property in the Custody of Contractors (NASA FORM 1018)--The Contractor shall submit the NASA Form 1018 no later than October 31 of each year in accordance with the Section I clause entitled "Financial Reporting of NASA Property in the Custody of Contractors."

K. Subcontracting Reports--The Contractor shall submit Standard Form 294, Subcontracting Report for Individual Contracts, Standard Form 295, Summary Subcontractor Report, and in accordance with the instructions on the reverse of the form.

In addition to the instructions on the reverse of the SF 295, the Contractor is required to comply with Clause 1852.219-75, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Reporting.

Pursuant to the contract clause entitled "Small Business, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan" (FAR 52.219-9 and 19.704(a)(5)), you are required to submit a letter progress report on a monthly basis. The "Monthly Progress Report for Socioeconomic Goals" shall be limited to the monthly data only (excluding cumulative data from beginning of Subcontract Plan) as required for Lines 10A, 10B, 10C, 11, and 12 of the Standard Form 294. (See Section J, Exhibit I.) Letter progress reports may be signed by the Contract Administrator or equivalent organizational level, and each report is due by the 10th calendar day of the month following the close of the reporting period.

L. Work Request Status Report - The Contractor shall submit a weekly status report illustrating the actual effort expended against all work requests. The report shall include but is not limited to information such as work requests status (active, hold or complete), cost, hours, description (title) and applicable work tracking numbers (i.e. work request, program, fabrication numbers etc.). Contractor may submit via electronic medium i.e. e-mail or via authorized access to reporting generation system.

M. Work Request Expenditure Report - The Contractor shall submit a weekly report identifying the actual effort expended against those work requests designated as applicable to this reporting requirement. The report shall identify the costs and hours expended in comparison to the parameters of the negotiated work request. Cost are to be broken out as labor and supply costs. Supply includes all material, components/parts and equipment which may be required to accomplish the work request. Contractor may submit via electronic medium i.e. e-mail or via authorized access to reporting generation systems.

N. Incentive Fee Report--The Contractor shall submit a Quarterly Incentive Fee Report within 10 operating days after the end of each quarter in accordance with Exhibit B, Surveillance and Cost Plus Incentive Fee (CPIF) Plan.

O. Federal Contractor Veterans Employment Report--In compliance with Clause 52.222-37, Employment Reports on Special Disabled Veterans and Veterans of the Vietnam Era, the Contractor shall submit the Federal Contractor Veterans Employment Reports (VETS-100) as required by this clause.

P. Evidence of Insurance--The Contractor shall submit evidence of the insurance coverage, required by the NASA Clause 1852.228-75 in Section I entitled "Minimum Insurance Coverage" (i.e., a Certificate of Insurance or other confirmation), to the Contracting Officer prior to performing under this contract. In the event the Government exercises its options to extend the term of the contract, the Contractor shall also present such evidence to the Contracting Officer prior to commencement of performance under the extension.

Q. Virginia and Local Sales Taxes--In accordance with Section H.8, you are required to submit a copy of the letter sent to the Virginia Tax Commission and a copy of the subsequent response.

II. DOCUMENT DISTRIBUTION REQUIREMENTS

A. Unless otherwise specified elsewhere in this contract, reports and other documentation shall be submitted F.O.B. destination as specified below, addressed as follows:

National Aeronautics and Space Administration
Langley Research Center
Attn: Contracting Officer, Mail Stop 126
Contract NAS1-97162
Hampton, VA 23681-0001

B. The following letter codes designate the recipients of reports and other documentation which are required to be delivered prepaid to Langley Research Center by the Contractor:

A--Contract Specialist, Mail Stop 126

B--Contracting Officer Technical Representative, Mail Stop 390

C--New Technology Representative, Mail Stop 212

D--Cost Accounting, Mail Stop 135

E--Safety Manager, Mail Stop 429

F--Industry Relations Office, Mail Stop 144

G--Programs and Resources Division, Mail Stop 104

H--Patent Counsel, Mail Stop 212

I--Industrial Property Office, Mail Stop 377

J--According to instructions on form

K--Small Business Specialist, Mail Stop 144

C. The following are the distribution requirements for reports and other documentation required with the numeral following the letter code specifying the number of copies to be provided:

DOCUMENT

LETTER CODE AND DISTRIBUTION

Financial Management Report (NASA Forms 533M and 533Q)	A-1, B-2, D-2, G-1
Financial Baseline Plan	A-1, B-2
Safety and Health Plan	A-1, B-1, E-1
Quality Plan	A-1, B-1, E-1
Monthly Progress Report	A-1, B-3
Quarterly Equipment Report	A-1, B-3
Quarterly Accident/Injury Report	A-1, B-1, E-1
Collective Bargaining Agreement	A-1, B-1, F-1
Property in the Custody of Contractors (NASA Form 1018)	A-1, B-1, I-4
Subcontracting Report for Individual Contracts (Standard Form 294)	A-1, K-1
Summary Subcontractor Report (Standard Form 295)	J
Monthly Progress Report for Socioeconomic Goals	A-1, K-1
Work Request Status Report	B-1
Work Request Expenditure Report	B-1
Incentive Fee Report	A-1, B-2
Federal Contractor Veterans Employment Report (VETS-100)	F-1
Virginia and Local Sales Tax Correspondence	A-1

D. When the Contract Administrator (A) is not designated above to receive a copy of a report or document, the Contractor shall furnish a copy of the report/document transmittal letter to the Contract Administrator. The Contractor shall also furnish a copy of the transmittal letter and a copy of each Financial Management Report to the delegated Administrative Contracting Officer of the cognizant DoD (or other agency) contract administrative services component.

EXHIBIT B

SURVEILLANCE AND COST PLUS INCENTIVE FEE (CPIF) PLAN

1. Evaluation Criteria

The criteria for determining incentive fee earned for each quarter is defined below. The Contractor shall submit an incentive fee report on a quarterly basis in response to the defined criteria which, will be evaluated by the Contracting Officer (CO) and Contracting Officer's Technical Representative (COTR) and appointed representative(s). The report to be submitted is addressed in Section 3 of this plan. Ratings shall be applied based upon the details provided in Section 2 of this plan.

(a) Quality		50%
Electronics Fabrication (Tasks 1.1-3)	45%	
Electronic Equipment (CLIN 2.0)	5%	
(b) Schedule		30%
Electronics Fabrication (Tasks 1.1-3)	25%	
Electronic Equipment (CLIN 2.0)	5%	
(c) Cost Control		20%
Electronics Fabrication (CLIN 1.0)		
Electronic Equipment (CLIN 2.0)		
		100%

2. Performance Measurement

A. Quality/Electronics Fabrication - Forty-five percent of the available incentive fee shall be based upon the number of completed electronics fabrication work requests returned by the customer or the NASA Quality Inspector with errors attributable to the Contractor (reference Table A). An error attributable to the Contractor is work not in compliance with the NASA Assurance Standards Publications NAS/NHB 5300.4 Series and/or work not conforming to assembly drawings, diagrams, etc., and/or specifications provided with work requests. Earned fee shall be reduced by an additional 10 percent for each work request designated as "Quality Sensitive" that is returned with errors attributable to the Contractor. (All work requests returned with errors attributable to the Contractor shall be reworked.)

TABLE A

Number of Work Requests Returned With Errors Attributable to the Contractor	Percentage of 45 Percent of Available Fee
0	100%
1 - 2	80%
3 - 4	60%
> 4	0%

B. Quality/Electronic Equipment - Five percent of the available incentive fee shall be based upon the number of completed electronic equipment work requests/tasks with errors attributable to the Contractor (reference Table B). The number of "Call Backs" on equipment repairs shall serve as a measure of equipment repair quality.

TABLE B

Number of "Call Backs" for Equipment Repairs	Percentage of 5 Percent of Available Fee
0	100%
1 - 2	80%
3	60%
> 3	0%

C. Schedule/Electronics Fabrication - Twenty-five percent of the available incentive fee shall be based upon the percentage of completed electronics fabrication work requests completed within schedule (reference Table C). The final percentage for earned fee shall be reduced by an additional 10 percent for each missed "Must Hold" delivery date.

TABLE C

Percentage of Work Requests Completed On Time	Percentage of 25 Percent of Available Fee
98 - 100%	100%
94 - 97%	80%
90 - 93%	60%
< 90%	0%

D. Schedule/Electronic Equipment - Five percent of the available incentive fee shall be based upon the percentage of completed electronic equipment work requests/tasks completed in a timely manner (reference Table D). In computing the quarterly down time percentage, it is assumed that eight (8) hours of operational time are required each day (excluding weekend days and holidays) for the machines listed in Exhibit H, Equipment List 3. This results in an average total of 500 hours operational time per machine in Exhibit H, Equipment List 3. The equipment down time percentage shall be calculated as follows:

Down Time Percentage = $\frac{\text{Total down time (in hours) for all machines listed in Exhibit H, List 3}}{\text{Number of machines in Exhibit H, List 3} \times 500 \text{ Operation Hours}} \times 100$

TABLE D

Equipment "Down Time" Percentage	Percentage of 5 Percent of Available Fee
0 - 1.5%	100%
1.6 - 2.0%	80%
2.1 - 2.5%	60%
> 2.5%	0%

E. Cost Control - Twenty percent of the available incentive fee shall be based upon the Contractors ability to control cost under CLIN 1.0 and CLIN 2.0. See Section 3, Step 5F for the calculation of cost. The following Incentive Fee chart (Table E) will be used in determining the appropriate fee per period for cost.

TABLE E

Fee Category	Percentage
Maximum Fee	6.0%
Target Fee	5.0%
Minimum Fee	0.0%

3. Reporting Requirements and Evaluation Frequency

The Contractor shall submit on a quarterly basis to the CO and COTR a fee determination report. The report shall contain a contract number, the current date, report number with the applicable reporting period, and the total fee for the period in accordance with the instructions. The total fee computed will be subjected to Government Surveillance in accordance with Section 4 of this plan. The amount of incentive fee earned shall be based upon the Contractor's performance for work requests completed during the period as measured against the performance metrics specified in the SOW. The quarterly report should appear as follows or in a like format and be completed using the directions below.

(1)	(2)	(3)	(4)	(5)
Work Requests	Quality Metric	Schedule Metric	Target Cost	Total Actual Cost

Step 1 - In Column 1, make a complete listing of the work requests completed during the quarter under CLIN 1.0. While work requests are not issued for CLIN 2.0, identify only those tasks performed during the quarter in which the metric was not met for quality and/or schedule.

Step 2 - In Column 2, applicable work requests under CLIN 1.0 should be annotated with a "QS" if identified as "Quality Sensitive". In addition, indicate if the Contractor has failed to meet the work request quality metric by placing an "X" in the column. Work requests that required rework as a result of not meeting the quality metric will not be fee bearing and identified in Column 4, Target Cost, as \$0. If the Contractor has met the metric then the space should be left blank. Identify for CLIN 2.0 tasks that required a "Call Back" with a "CB".

Step 3 - In Column 3, applicable work requests under CLIN 1.0 should be annotated with a "MH" if identified as "Must Hold". In addition, indicate if the Contractor has failed to meet the work request schedule metric by placing an "X" in the column. If the Contractor has met the schedule then the space should be left blank. Identify for CLIN 2.0 tasks that experienced "Down Time" with a "DT" and the representative down time/hours.

Step 4 - In Column 4, identify the target cost for CLIN 2.0 and for each completed work request under CLIN 1.0. The target cost for CLIN 2.0 is the estimated cost identified in Section B.2 of the contract schedule broken out on a quarterly basis. The target cost for each work request under CLIN 1.0 is the negotiated work request amount (reference Section G.5, Work Requests). As stated above, any work requests that were reworked as a result of missing the quality metric will not be fee bearing and are to be identified in Column 4 as \$0. In Column 5, identify the total actual cost incurred under CLIN 2.0 for the three month period and for each work request completed under CLIN 1.0.

Step 5 - The Contractor shall calculate the following:

A. Target Cost:

The cumulative target cost for the period is the sum of Column 4.

B. The dollar amounts for Target Fee, Maximum Fee, and Minimum Fee:

Multiply the target cost by the negotiated fee percentages contained in the Incentive Fee Chart referenced in Table E.

C. The percentage of fee associated with the Quality Metric:

(1) The percentage for Quality/Electronics Fabrication is derived by taking the total number of X's in Column 2 and applying it to Table A of this plan. For example, if 3 work requests missed the quality metric then the percentage is 60%. Reduce the fee percentage by 10 additional percentage points for each missed quality work request annotated with a "QS". For example, if 2 of the 3 missed work requests were annotated with a "QS" then the 60% will be reduced by 20 percentage points to 40%.

(2) The percentage for Quality/Electronic Equipment is derived by taking the total number of X's or "CBs" in Column 2 and applying it to Table B of this plan. For example, if 2 tasks missed the quality metric then the percentage is 80%.

D. The percentage of fee associated with the Schedule Metric:

(1) The percentage for Schedule/Electronics Fabrication is calculated by subtracting the total number of X's in Column 3 from the total number of work requests completed during the period and dividing the resulting number by the total number of work requests completed during the period times 100. This percentage is then applied to Table C of this plan. For example, if there is 1X and 10 work requests completed during the period then the percentage of work requirements where the Contractor has met the schedule is $((10-1)/10) \times 100 = 90\%$. The 90% is then applied to Table C of this plan, resulting in 60% for schedule. Reduce the final fee percentage by 10 additional percentage points for each missed schedule annotated with a "MH". For example, if the 1 missed schedule was annotated with a "MH" then the 60% will be reduced by 10 percentage points to 50%.

(2) The down time percentage for Schedule/Electronic Equipment is calculated as shown in Section 2, Paragraph D of this plan. The hours identified in Column 3 for CLIN 2.0 will be used in the formula identified in Paragraph D. The calculated down time percentage is then applied to Table D.

E. The quality and schedule metric fee amount:

Multiply the percentages computed under C and D above by the maximum fee amount established in B above. The Quality Fee and the Schedule Fee will be used in G below to compute the Final Fee.

F. The fee associated with cost:

Calculate by using an 70/30 Fee adjustment formula which represents a share line where the Government's share is 70% and the Contractor's share is 30%. The calculation is as follows:

- (1) Compute the cost variance:
 $\text{Cost Variance} = \text{Total Actual Cost (sum of Column 5)} - \text{Target Cost (sum of Column 4)}$
- (2) Compute the Change in Fee:
 $\text{Change in Fee} = \text{Contractor's Share (30\%)} \times \text{Cost Variance}$
- (3) Compute the Fee associated with the cost metric:

Underrun

Fee for cost metric = Underrun (Actual cost < Target Cost) then: Target Fee + Change in Fee or the Maximum Fee calculated in Step 5B, whichever is less.

Overrun

Fee for cost metric = Overrun (Actual Cost > Target Cost) then: Target Fee - Change in Fee or the Minimum Fee calculated in Step 5B, whichever is greater.

G. Calculation of Final Fee:

Final Fee = (Quality/Electronics Fabrication from Step 5E) x (0.45) +
 (Quality/Electronic Equipment from Step 5E) x (0.05) +
 (Schedule/Electronics Fabrication from Step 5E) x (0.25) +
 (Schedule/Electronic Equipment from Step 5E) x (0.05) +
 (Cost from Step 5F) x (0.20)

4. Surveillance

The quarterly fee report will be reviewed by the Government to verify that the Contractor has correctly and accurately computed the appropriate amount of fee for the period. This review will be completed by the Government within 5 working days from receipt of the Incentive Fee Report. Once the Government notifies the Contractor of acceptance of the report a proper voucher may be submitted for payment. Accuracy of reporting of quality and schedule will be consist of periodic visual monitoring of operations by the COTR or dually appointed representative(s), the NASA Quality Inspector and ISO Auditor and random audits of reports during the evaluation period. Other surveillance techniques may be employed if considered necessary by the Government. If random audits detect reporting errors, the Contractor's final percentage of incentive fee on the element(s) found in error will be reduced by 5% for the first occurrence. Any repeated reporting errors will result in an incentive fee of 0% for the element(s) found in error.

The Government reserves the right to audit actual cost records to verify accuracy for computation of fee for the cost metric. Upon any such audit, the Government may adjust the fee claimed for the current period or previous periods to reflect the correct actual cost. The Contractor shall maintain accounting records that show costs for each work requirement.

NOTE: Remainder of Exhibits have been deleted from this electronic copy.